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APPLICATION NO.	FILING DATE:	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,577	01/11/2002	Timothy Good	108-120USA000	9393

7590 10/07/2003  
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EXAMINER

I.E. THIEN MINH

ART UNIT PAPER NUMBER

2876

DATE MAILED: 10/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/045,577	GOOD, TIMOTHY	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thien M. Le	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 January 2002.
- 2a) ☐ This action is FINAL.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_      6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

The preliminary amendment filed on 1/11/2002 has been entered. Claims 1-14 are presented for examination.

#### *Double Patenting*

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1-14 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-14 of copending Application No. 10/227,545. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Identical to claim 1 of the invention, claim 1 of the '545 application recites:

1. A bioptical laser scanning device comprising:

a bottom-scanning window substantially orthogonal to a side-scanning window;

at least one scanning element that cooperates with a plurality of laser beam folding mirrors to produce a plurality of horizontal scanning planes that project from exterior portions of the side-scanning window at a characteristic propagation direction whose non-vertical component is greater than thirty-five degrees from normal of the side-scanning window.

Claims 2-14 are rejected in view of claims 2-14 of the '545 application in that the claims are recited as follow:

2. The bioptical laser scanning device of claim 1, wherein said plurality of horizontal scanning planes include at

least one group of horizontal scanning planes that project from the exterior left portion of the side-scanning window and include at least one group of horizontal scanning planes that project from the exterior right portion of the side-scanning window.

3. A bioptical laser scanning device comprising: a bottom-scanning window substantially orthogonal to a side-scanning window; at least one scanning element that cooperates with a plurality of laser beam folding mirrors to produce a plurality a vertical scanning planes that project from portions of the bottom-scanning window proximate to the back of the bottom-scanning window and the bottom of the side-scanning window.

4. The bioptical laser scanning device of claim 1, wherein the vertical scanning planes project from back-left and back-right corners of the bottom-scanning window that are proximate to the bottom of the side-scanning window.

5. A bioptical laser scanning device comprising: a bottom-scanning window substantially orthogonal to a side-scanning window, wherein the bottom-scanning window has four corners; at least one scanning element that cooperates with a plurality of laser beam folding mirrors to produce a plurality a vertical scanning planes that project from each one of the four corners of the bottom-scanning window.

6. A bioptical laser scanning device comprising: a bottom-scanning window substantially orthogonal to a side-scanning window; at least one scanning element that cooperates with a plurality of laser beam folding mirrors to produce a plurality of groups of vertical scanning planes that project from the bottom-scanning window, wherein said plurality of groups include first and second groups of vertical scanning planes that project from opposing portions of the bottom-scanning window, and said plurality of groups include third and fourth groups of vertical scanning planes, different from said first and second groups, that project from opposing portions of the bottom-scanning window.

7. The bioptical laser scanning device of claim 6, wherein the first and second groups project from the back-left and front-right corners, respectively, of the bottom-scanning window, and wherein the third and fourth groups project from

the back-right and front-left corners, respectively, of the bottom-scanning window.

8. The bioptical laser scanning device of claim 6, wherein the first and second groups of vertical scanning planes are substantially co-planar, and wherein the third and fourth groups of vertical scanning plane are substantially co-planar.

9. The bioptical laser scanning device of claim 6, wherein the first and second groups of vertical scanning planes are substantially orthogonal to the third and fourth groups of scanning planes.

10. A bioptical laser scanning device comprising: a bottom-scanning window substantially orthogonal to a side-scanning window; at least one scanning element that cooperates with a plurality of groups of laser beam folding mirrors to produce a plurality a vertical scanning planes projecting from the bottom-scanning window that are capable of reading bar-code symbols on the bottom surface and all four sides of a four-sided article.

11. A laser scanning device comprising at least one window; and at least one laser beam production module that cooperates with a rotating polygonal mirror and a plurality of laser beam folding mirrors to produce a plurality of scanning planes that project through the window, wherein the incidence angle of the laser beam produced by the laser beam production module is offset with respect to the axis of rotation of the rotating polygonal mirror.

12. The laser scanning device of claim 11, further comprising a plurality of laser beam production modules that cooperate with the rotating polygonal mirror and the plurality of laser beam folding mirrors to produce a plurality of scanning planes that project through the window, wherein the incidence angle of the laser beam produced by each laser beam production module is offset with respect to the axis of rotation of the rotating polygonal mirror to produce overlapping scanning ray patterns that are incident on at least one common mirror to provide a dense scanning pattern projecting therefrom.

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13. The laser scanning device of claim 12, wherein the window comprises one of a bottom-scanning window and a side-scanning window of a bioptical laser scanner.

14. The laser scanning device of claim 13, wherein the common mirror redirects the dense scanning pattern incident thereon to form a plurality of horizontal scan planes that project from the front side of the bottom-scanning window diagonally upward toward the side-scanning window.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thien M. Le whose telephone number is (703) 305-3500. The examiner can normally be reached on Monday - Friday from 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



**Le, Thien Minh  
Primary Examiner  
Art Unit 2876  
September 20, 2003**